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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,070	06/30/2003	Masahiro Ebiko	OGW-0263	7834

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EXAMINER

FISCHER, JUSTIN R

ART UNIT PAPER NUMBER

1733

DATE MAILED: 01/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/608,070

Applicant(s)

EBIKO, MASAHIRO

Examiner

Justin R Fischer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 5-7 is/are rejected.
- 7) ☒ Claim(s) 3,4,8 and 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 063003 and 092403.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 5, and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Kajikawa (JP 2001-191745). As best depicted in Figures 1, 2, and 4, Kajikawa is directed to a pneumatic tire construction having an ornamental section 9 over a substantial portion of the sidewall region (represented by arc Dp). The reference further teaches that the ornamental section is formed by groupings of vertical ridges 10, wherein said groupings are circumferential spaced by sidewall regions 11 (analogous to 2a of claimed invention). In this instance, the vertical ridges are analogous to the “concave grooves on the sidewall surface” and thus define “numerous concavo-convex stripes”. As to the depth of the grooves (defined between ridges), Kajikawa suggests a depth between 0.3 to 2.0 millimeters (Paragraph 24). While the vertical ridges of Kajikawa extend away from the sidewall portion, the claim as currently drafted does not require that the ridges or grooves are recessed into the sidewall portion. In regards to the interval between adjacent serrated portions (analogous to distinct groupings of vertical ridges), Kajikawa suggests a spacing d between 1.3 and 5 times the spacing  $\delta$  between vertical ridges within a grouping (Paragraph 32), wherein the spacing  $\delta$  is between 0.3 and 5.0 millimeters. Thus, Kajikawa positively teaches, at a minimum, an

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embodiment in which  $d$  is at least equal to 6.5 millimeters (occurs when  $\delta = 5.0$  millimeters). As to the spiral arrangement of the serrated portions, it is clearly evident that the vertical ridges of Kajikawa are inclined with respect to the radial direction of the tire (up to 60 degrees, Paragraph 9)- this arrangement is seen to constitute a spiral arrangement in an analogous manner to the claimed invention.

It is initially noted that the distance between adjacent serrated portions (in the claimed invention) is described as being measured in the radial direction. It is evident that the distance  $d$  increasingly becomes a "radial measurement" as the inclination of the groupings (of vertical ridges) increases. Furthermore, when the groupings are not heavily inclined, the radial spacing between groupings is greater than the axial distance  $d$  depicted in Figure 4.

With respect to claim 5, Kajikawa teaches that the spacing  $\delta$  is between 0.3 and 5.0 millimeters. This distance is analogous to the alignment pitch of the claimed invention and such, the range of Kajikawa fully incorporates the range of the claimed invention.

Regarding claim 7, Figure 4 of Kajikawa depicts the grooves (defined between adjacent vertical ridges) as having a trapezoidal shape in cross-section.

***Claim Rejections - 35 USC § 102/103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kajikawa. As best depicted in Figure 1, the ornamental section of the tire having a plurality of groupings of vertical ridges extends over an arc Dp defined by the points O and I. It is clearly evident said arc occupies a substantial portion of the sidewall (defined as the region between the rim check line and the tread design end). One of ordinary skill in the art at the time of the invention would have recognized such a region as representing greater than 30 percent of the sidewall region. In any event, one of ordinary skill in the art at the time of the invention would have found it obvious to form between 30 and 70 percent of the sidewall with the above noted ornamental section depending on the desired aesthetic characteristics of the tire. It is further noted that while it is unclear if the drawings are "working drawings", they reasonably convey a pneumatic tire construction in which the ornamental section occupies at least 30 percent of the sidewall portion.

***Claim Rejections - 35 USC § 103***

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kajikawa and further in view of Barrese (US 5,728,242). As depicted in Figure 4, the vertical ridges 10 of Kajikawa define a plurality of grooves having a trapezoidal cross-section. While the reference fails to suggest the formation of grooves with a triangular shape, it is extremely well known that grooves are commonly formed with both trapezoidal and triangular orientations, as shown for example by Barrese (Column 4, Lines 66+). In this instance, Barrese is directed to an extremely similar tire construction and suggests the use of either trapezoidal or triangular ribs (define geometry of recesses or grooves). It

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is emphasized that each of these geometries is extensively used in a wide variety of decorative designs in the manufacture of tire sidewalls and as such, one of ordinary skill in the art at the time of the invention would have found it obvious to form the grooves of Kajikawa with a triangular cross-section (represents a well-known and suitable geometry). Lastly, applicant has not provided a conclusive showing of unexpected results to establish a criticality for a triangular cross-section.

### ***Allowable Subject Matter***

6. Claims 3, 4, 8, and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The closest prior art of record is Kajikawa- the reference, though, fails to include a protection protrusion along the periphery of each serrated portion and fails to describe the serrated portions as being triangular in shape and having a narrowing width from a radially outer end of said serrated portion.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Endo (Des. 475,345) depicts a tire construction having a sidewall decorative arrangement that appears to be spirally oriented.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R Fischer** whose telephone number is **(571) 272-1215**. The examiner can normally be reached on M-F (7:30-4:00).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Justin Fischer

January 13, 2005